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10/708,245	02/19/2004	Shih-Hung Chao	DECP0008USA	2244
27765	7590	05/02/2007		
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER PIZIALI, JEFFREY J	
			ART UNIT	PAPER NUMBER
			2629	
			NOTIFICATION DATE	DELIVERY MODE
			05/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/708,245	Applicant(s) CHAO ET AL.	
	Examiner Jeff Piziali	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 9, 18 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicants' election of Species II, Sub-Species A, Sub-Sub-Species 1 (i.e., claims 1-8, 10-17, and 19-25) in the reply filed on 15 February 2007 is acknowledged and appreciated. Because applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 9, 18, and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 15 February 2007.
3. Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

5. The drawings were received on 15 February 2007. These drawings are acceptable.

Specification

6. The disclosure is objected to because of the following informalities: Paragraph 8, Line 6 should be changed from "many detracts" to "many detractions." Appropriate correction is required.

7. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants' cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Independent claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. The term "smooth surface" in independent claims 1 and 10 is a relative term which renders each claim indefinite. The term "smooth surface" is not defined by the claims, the

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specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

It would be unclear to one having ordinary skill in the art at the time of invention precisely how rough a surface could be before it would cease to qualify as a "smooth surface."

11. Independent claim 10 recites the limitation "the front half" in line 10. There is insufficient antecedent basis for this limitation in the claim.

12. Independent claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between the "flat surface" that the first and second bottom sides *form* (see line 7) and the "flat surface" that the first and second bottom sides *remain on*. It would be unclear to one having ordinary skill in the art at the time of invention whether there is/are one or more flat surface(s) being claimed. Are the two bottom sides on the flat surface, or do they form the surface itself?

13. Claims 2-8, 11-17, and 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-5, 7, 8, 10-14, 16, 17, 19-22, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by *Hesley et al (US 6,489,947 B2)*.

Regarding claim 1, Hesley discloses a pointing device (see Column 1, Lines 25-29) comprising: a housing [Fig. 3A; 210] comprising an upper cover [Fig. 3A; 310]; a main body [Fig. 3A; 201] retractably fixed under the housing, the main body comprising a front half [Fig. 3A; 270, 271, 301] and a back half [Fig. 3A; 201A]; and an input section [Fig. 3A; 270, 271] placed on the front half of the main body for generating / inputting key signals, wherein the top surface of front half and the top surface of back half of the main body forming a smooth surface (see Fig. 2C; Column 10, Line 20 - Column 12, Line 14).

Regarding claim 2, Hesley discloses the bottom side of the housing [Fig. 3A; 311] and the bottom side of the main body [Fig. 3A; 302] are fixed at the same level (see Fig. 2C; Column 11, Lines 1-10).

Regarding claim 3, Hesley discloses the housing further comprises two extending arms [Fig. 3A; 224], which extend from the upper cover and has the main body positioned between the

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two extending arms, for fixing the main body under the upper cover (see Column 17, Lines 28-43).

Regarding claim 4, Hesley discloses when the main body is under the housing, the front of the two extending arms of the housing is flush with the main body (see Fig. 2C; Column 10, Line 20 - Column 12, Line 14).

Regarding claim 5, Hesley discloses a mouse (see Column 1, Lines 25-29).

Regarding claim 7, Hesley discloses a guide [Fig. 3A; 318, 320] and a track [Fig. 3A; 215, 315] that are placed between the housing and the main body in order to freely change the position of the housing with respect to the main body (see Column 11, Line 40 - Column 12, Line 14).

Regarding claim 8, Hesley discloses the main body further comprises a plurality of notches [Fig. 3B; 367, 368]; the housing further comprises a latch [Fig. 3B; 362]; and the latch comprises a tooth [Fig. 3A; 360]; wherein the positions of the housing with respect to the main body is fixed by fitting tooth of the latch fits the plurality of notches so that when the latch the tooth of the latch into a corresponding notch from the plurality of notches (see Column 12, Lines 15-50).

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, Hesley discloses pointing device (see Column 1, Lines 25-29) comprising: a housing [Fig. 3A; 210] comprising a first edge [Fig. 3A; 226, 310]; a main body [Fig. 3A; 201] retractably fixed under the housing, wherein a fixed space exists between the first edge of the housing and a smooth surface [Fig. 3A; 201A] of the main body, the fixed space being only large enough for first edge of the housing to slide over the smooth surface of the main body when the positions of the housing and main body relative to each other are adjusted; an input section [Fig. 3A; 270, 271] placed on the front half [Fig. 3A; 270, 271, 301] and exposed out from the housing; wherein when the positions of the main body and the housing relative to each other are adjusted, a fixed space exists between the first edge and the smooth surface (see Figs. 2A, 2C; Column 10, Line 20 - Column 12, Line 14).

Regarding claim 11, this claim is rejected by the reasoning applied in rejecting claim 2.

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claim 7.

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Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 19, this claim is rejected by the reasoning applied in rejecting claims 1 and 10; furthermore, Hesley discloses a pointing device (see Column 1, Lines 25-29) comprising: a housing [Fig. 3A; 210] comprising a first bottom side [Fig. 3A; 311]; a main body [Fig. 3A; 201] comprising a second bottom side [Fig. 3A; 302] and retractably fixed under the housing; and an input section [Fig. 3A; 270, 271] placed on the main body; wherein the first bottom side and the second bottom side form a flat surface, and when the positions of the main body and the housing relative to each other are adjusted, the first bottom side and the second bottom side remain on the same flat surface (see Figs. 2A, 2C; Column 10, Line 20 - Column 12, Line 14).

Regarding claim 20, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 21, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 22, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 24, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 25, this claim is rejected by the reasoning applied in rejecting claim 8.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 6, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hesley et al (US 6,489,947 B2)* in view of *Iwasaki (US 7,119,791 B2)*.

Regarding claim 6, Hesley discloses the input section comprises two keys [Fig. 3A; 270, 271] (see Column 10, Lines 44-57). Hesley does not expressly disclose placing a wheel between the two keys.

However, Iwasaki discloses an input section comprises two keys [Fig. 1; 14, 15] and a wheel [Fig. 1; 16] that is placed between the two keys (see Column 4, Lines 8-15).

Hesley and Iwasaki are analogous art, because they are from the shared inventive field of mouse-type computer pointing devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to add Iwasaki's keys and wheel arrangement as Hesley's input section, so as to provide the mouse user with an additional input device (i.e., the wheel) for enhanced interaction with the computer.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 6.

Regarding claim 23, this claim is rejected by the reasoning applied in rejecting claim 6.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Silverstein (US 6,970,156 B1), Doan (US 6,921,054 B2), Brophy et al (US 6,616,108 B1), Smith et al (US 6,600,479 B1), Kravtin et al (US 6,396,478 B1), Derocher et al (US 6,304,249 B1), Kravtin et al (US 6,157,370 A), Chen et al (US 5,990,870 A), Itoh et al (US 5,847,696 A), Rice (US 5,490,647 A), and Maynard Jr (US 5,260,696 A) are cited to further evidence the state of the art pertaining to pointing devices.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeff Piziali
27 April 2007